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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,965	07/25/2003	Rudolf J. Hofmeister	15436.215	3965

7590 01/24/2007  
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EXAMINER
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PHAN, HANH

ART UNIT	PAPER NUMBER
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2613

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/24/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/626,965	<b>Applicant(s)</b> HOFMEISTER ET AL.	
	<b>Examiner</b> Hanh Phan	<b>Art Unit</b> 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 07 November 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25, 27-32 and 37-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25, 27-32 and 37-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed on 11/07/2006.
2. The indicated allowability of claim 26 is withdrawn in view of the newly discovered reference(s) to Aronson et al (US Patent No. 7,099,382). Rejections based on the newly cited reference(s) follow.

### ***Drawings***

3. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-25, 27-32 and 37-42 are rejected under 35 U.S.C. 102(e) as being anticipated by Aronson et al (US Patent No. 7,099,382)

The applied reference has a common assignee with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claims 1, 29 and 31, referring to Figures 6-9, 12A-12D, 13A-13D, 14, 15, 18 and 25-28, Aronson et al. teaches a transceiver (i.e., transceiver module 200, Fig. 12A) for use in connecting a host with an optical network, the transceiver (i.e., transceiver module 200, Fig. 12A) comprising:

an input port (i.e., input port 407, Fig. 12A) that receives electrical signals from a host; the input port being in communication with an optical transmitter (i.e., TOSA, Fig. 12A) for generating an optical signal for transmission to the optical network (i.e., col. 10, lines 9-67 and col. 11, lines 1-22);

an output port (i.e., output port 409, Fig. 12A) that sends electrical signals to the host, the output port being in communication with an optical receiver (i.e., ROSA, Fig. 12A) that receives optical signals from the optical network and

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converts the optical signals into electrical signals (i.e., col. 10, lines 9-67 and col. 11, lines 1-22);

a loopback path (i.e., a first loopback mode 405 from the input 407 to the output 409, Fig. 12A) for selectively coupling an incoming electrical signal from the input port to the output port (i.e., col. 10, lines 9-67 and col. 11, lines 1-22);

a pass-through port (i.e., Figs. 12A and 14); and

a pass-through path (i.e., Figs. 12A and 14) configured to selectively couple an incoming electrical signal from the input port to the pass-through port (i.e., Figs. 12A-12D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claims 2 and 25, Aronson et al further teaches a post amplifier (i.e., post amplifier PA, Fig. 12A) and a laser driver (i.e., LDR, Fig. 12A), wherein the loopback path comprises a conductive path on the integrated chip.

Regarding claim 3, Aronson et al further teaches the loopback path passes through at least one of the post amplifier and the laser driver (i.e., Figs. 12A-12D).

Regarding claims 4 and 16, Aronson et al further teaches the loopback path does not pass through the post amplifier or the laser driver (i.e., Figs. 12A-12D and 14).

Regarding claims 5 and 15, Aronson et al further teaches the integrated chip further comprises a receiver eye opener (i.e., Eye Opner 205B, Fig. 12A) and a transmitter eye opener (i.e., Eye opner 205a, Fig. 12A).

Regarding claims 6 and 17, Aronson et al further teaches the loopback path passes through at least one of the receiver eye opener and the transmitter eye opener (i.e., Figs. 12A-12D and 14).

Regarding claims 7, 18 and 19, Aronson et al further teaches the loopback path does not pass-through the receiver eye opener or the transmitter eye opener (i.e., Figs. 12A-12D and 14).

Regarding claims 8 and 20, Aronson et al further teaches the receiver eye opener comprises at least one of a clock and data recovery, an RT, and a buffer (i.e., Figs. 13A and 13B); and the transmitter eye opener comprises at least one of a clock and data recovery, an RT, and a buffer; and the loopback path passes through at least one of the at least one of a clock and data recovery, an RT, and a buffer on the receiver eye opener and the at least one of a clock and data recovery, an RT, and a buffer on the transmitter eye opener (i.e., Figs. 12A-12D, 13A-13D and 14).

Regarding claims 9, 21 and 27, Aronson et al teaches further comprising multiple loopback paths such that a network administrator can selectively route the electrical signal through one or more of the at least one of a clock and data recovery, an RT, and a buffer on the receiver eye opener and the at least one of a clock and data recovery, an RT, and a buffer on the transmitter eye opener in order to evaluate different components on the transceiver (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claims 10, 22, 28, 30 and 32, Aronson et al further teaches the transceiver can be remotely controlled to place the transceiver in one of:

a normal mode such that incoming electrical signals are routed from the input port to an optical transmitter which generates an optical output in response to the electrical input signal;

a loopback mode such that incoming electrical signals bypass the optical transmitter and are routed to the output port; and

a pass-through mode such that incoming electrical signals are selectively coupled from the input port to the pass-through port (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 11, Aronson et al further teaches the loopback path is configured for diagnosing the operation of a host, the transceiver, and optical devices interconnecting the host and the transceiver (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 12, referring to Figures 6-9, 12A-12D, 13A-13D, 14, 15, 18 and 25-28, Aronson et al. teaches a transceiver (i.e., transceiver module 200, Fig. 12D) for use in connecting an optical network to a host, the transceiver comprising:

an optical transmitter (i.e., TOSA, Fig. 12D) generating an optical output in response to an electrical input signal applied to an input of the optical transmitter;

an optical receiver (i.e., ROSA, Fig. 12D) generating an electrical output signal at a receiver output in response to an optical input; and

a loopback path (i.e., loopback 425, Fig. 12D) for selectively coupling the electrical output signal from the optical receiver to the input of the optical transmitter

a pass-through port; and

a pass-through path configured to selectively couple the electrical output signal from the optical receiver to the pass-through port (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 13, Aronson et al further teaches the loopback path is configured for bypassing a transceiver output port and coupling the electrical output signal to the input of the optical transmitter (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 14, Aronson et al further teaches the loopback path is configured for diagnosing the operation of a remote host, the transceiver, and optical devices interconnecting the remote host and the transceiver (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 23, referring to Figures 6-9, 12A-12D, 13A-13D, 14, 15, 18 and 25-28, Aronson et al. teaches a transceiver (i.e., transceiver module 200, Figs. 12A-12D) for use in connecting an optical network to a host, the transceiver comprising:

an input port (i.e., input 407, Figs. 12A-12D) for receiving an electrical input signal from a host;

an optical transmitter (i.e., optical transmitter TOSA, Figs. 12A-12D) generating an optical output in response to the electrical input signal applied to a transmitter input;



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an optical receiver (i.e., optical receiver ROSA, Figs. 12A-12D) generating an electrical output signal at a receiver output in response to an optical input;

an output port for relaying the electrical output signal to the host (i.e., Figs. 12A-12D);

a first loopback path (Figs. 12A-12D) for selectively coupling the electrical input signal from the input port to the output port; and

a second loopback path (i.e., Figs. 12A-12D) for selectively coupling the electrical output signal from the optical receiver to the optical transmitter;

a pass-through port (i.e., Figs. 12-12D and 14); and

at least one of:

a first pass-through path configured to selectively couple the electrical input signal from the input port to the pass-through port in a pass-through mode; and

a second pass-through path configured to selectively couple the electrical output signal from the optical receiver to the pass-through port in a pass-through mode (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claim 24, Aronson et al further teaches the first loopback path is configured for bypassing the optical transmitter and directing the electrical input signal to the output port and the second loopback path is configured for bypassing the output port and directing the electrical output signal to the optical transmitter (i.e., Figs. 12A-12D, 13A-13D and 14, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claims 37, 39 and 41, Aronson et al further teaches the transceiver is configured to be daisy-chained with another transceiver by way of the pass-through port (i.e., Figs. 12A-12D, 13A-13D, 14 and 25-28, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

Regarding claims 38, 40 and 42, Aronson et al further teaches the pass-through port is configured to send signals to selected devices for analysis (i.e., Figs. 12A-12D, 13A-13D, 14 and 25-28, col. 10, lines 9-67, col. 11, lines 1-22, col. 12, lines 44-67 and col. 13, lines 1-59).

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-25 and 27-32 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**